

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/858,080	05/15/2001	Kevin Collins	10006721-1	2538
7	590 09/21/2004		EXAM	INER
HEWLETT-PACKARD COMPANY			BATURAY, ALICIA	
Intellectual Property Administration				
P.O. Box 272400			ART UNIT	PAPER NUMBER
Fort Collins, CO 80527-2400			2155	<u>-</u>

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

St

			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
•	Application No.	Applicant(s)	
Office Action Comme	09/858,080	COLLINS ET AL.	<b>→</b>
Office Action Summary	Examiner	Art Unit	
	Alicia Baturay	2155	
The MAILING DATE of this communication Period for Reply	n appears on the cover sheet wi	th the correspondence addres	SS
A SHORTENED STATUTORY PERIOD FOR R THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 Clafter SIX (6) MONTHS from the mailing date of this communication  - If the period for reply specified above is less than thirty (30) days,  - If NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	ON. FR 1.136(a). In no event, however, may a roon. a reply within the statutory minimum of thirt beriod will apply and will expire SIX (6) MON statute, cause the application to become AB	eply be timely filed y (30) days will be considered timely. THS from the mailing date of this commu	unication.
Status			
1) Responsive to communication(s) filed on	15 May 2001.		
2a) ☐ This action is <b>FINAL</b> . 2b) ☑	This action is non-final.		·
3) Since this application is in condition for all	lowance except for formal matt	ers, prosecution as to the me	erits is
closed in accordance with the practice un	der <i>Ex parte Quayle</i> , 1935 C.D	. 11, 453 O.G. 213.	
Disposition of Claims			
4)⊠ Claim(s) <u>1-21</u> is/are pending in the applica	ation.		
4a) Of the above claim(s) is/are with			
5) Claim(s) is/are allowed.		•	•
6)⊠ Claim(s) <u>1-21</u> is/are rejected.			
7) Claim(s) <u>1,5,17 and 20</u> is/are objected to.			
8) Claim(s) are subject to restriction a	and/or election requirement.		
Application Papers			
9)⊠ The specification is objected to by the Exa	miner.		
10)⊠ The drawing(s) filed on 15 May 2001 is/are	e: a)⊠ accepted or b)⊡ objec	ted to by the Examiner.	
Applicant may not request that any objection to	o the drawing(s) be held in abeyan	ce. See 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the co			
11)☐ The oath or declaration is objected to by the	ne Examiner. Note the attached	d Office Action or form PTO-1	152.
Priority under 35 U.S.C. § 119	•		
12) Acknowledgment is made of a claim for for	reign priority under 35 U.S.C. §	119(a)-(d) or (f).	
a) All b) Some * c) None of:	,		
1. Certified copies of the priority docur	ments have been received.		
2. Certified copies of the priority docur			
3. Copies of the certified copies of the	•	received in this National Sta	ge -
application from the International Bu		ivad	
* See the attached detailed Office action for a	a list of the certified copies not	received.	
		•	
Attachment(s)	ſ		
1) Notice of References Cited (PTO-892)		Summary (PTO-413)	
2) Notice of Draftsperson's Patent Drawing Review (PTO-94	8) Paper No(s	s)/Mail Date formal Patent Application (PTO-152	· 2 <b>)</b>
<ol> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/S Paper No(s)/Mail Date</li> </ol>	6) Other:	iioiniai r atent Application (PTO-152 	<del>-</del> )
S. Patent and Trademark Office			1

Art Unit: 2155

### **DETAILED ACTION**

1. Claims 1-21 are pending.

## Specification

- 2. The disclosure is objected to because of the following informalities: on page 11, line 17, Applicant states "For example, the transaction 200-202 is given the highest priority..." It is thought Applicant meant to write "For example, the transaction 200 is given the highest priority..." Appropriate correction is required.
- 3. The use of the trademarks Intel Pentium and Palm Pilot has been noted in this application.

  They should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

### Claim Objections

4. Claims 1, 5, 17, and 20 are objected to because of the following informalities: they are written in an outline format (a), b), etc.), and should be written in sentence form. Appropriate correction is required.

Application/Control Number: 09/858,080 Page 3

Art Unit: 2155

## Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

apprised of the scope of the invention.

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 6. The term "part" in claim 3 is a relative term which renders the claim indefinite. The term "part" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably
- 7. Claim 7 recites the limitation "...usage policy comprises a number of rules, each defining meta data..." The phrase "defining meta data" appears to be inconsistent with the specification because the specification only indicates that a transaction has "meta data" associated with it, and does not define the meta data.
- 8. The term "a number of" in claim 12 is a relative term which renders the claim indefinite. The term "a number of" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

#### Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2155

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 10. Claims 1, 3, 4, 5, 8, 13, 14, 16-19, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nolan et al. (U.S. 6,640,278) and further in view of Kanada (US 2001/0039576 A1).
- 11. As to claims 1, 3, and 16, Nolan teaches a method for managing transactions at a network storage device (Nolan, col. 1, lines 27-29) comprising: receiving and reading a transaction at the network storage device (Nolan, col. 2, lines 46-49) and assigning a priority to the transaction (Nolan, col. 27. lines 65-67), but does not disclose a usage policy. However, Kanada does teach a usage policy (Kanada, page 1, paragraph 8). It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Nolan and Kanada to contribute toward the goal of minimal human network administration so that only a single server needs to be updated and all related network devices will automatically download this update and behave similarly (Kanada, page 1, paragraph 7).
- 12. As to claim 4, the combination of Nolan and Kanada (Nolan-Kanada) discloses the invention substantially as described in claim 1, including ordering the transaction among other transactions in a queue at the network storage device (Nolan, Fig. 29; col. 29, lines 29-35).
- 13. As to claim 5, Nolan-Kanada discloses the invention substantially including managing transactions at a network storage device (Nolan, col. 1, lines 27-29) comprising: generating a usage policy for the network storage device and distributing the usage policy to the network

Art Unit: 2155

storage device (Kanada, Fig. 2) for prioritizing transactions (Kanada, Fig. 3B, element 387; page 10, paragraph 152). It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Nolan and Kanada to contribute toward the goal of minimal human network administration so that only a single server needs to be updated and all related network devices will automatically download this update and behave similarly (Kanada, page 1, paragraph 7).

- 14. As to claims 8 and 13, Nolan-Kanada discloses the invention substantially including a usage policy being stored on a network storage device (Kanada, page 2, paragraph 28) and ability to prioritize transactions based on a usage policy (Kanada, Fig. 3B, element 387; page 10, paragraph 152). It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Nolan and Kanada to contribute toward the goal of minimal human network administration so that only a single server needs to be updated and all related network devices will automatically download this update and behave similarly (Kanada, page 1, paragraph 7).
- 15. As to claim 14, Nolan-Kanada discloses the invention substantially including the ability to define a usage policy at a policy management server and the ability to distribute it to a network storage device (Kanada, page 14, paragraph 188).
- 16. As to claim 17, Nolan-Kanada discloses the invention substantially, including the ability to install on a policy management server (Kanada, page 3, paragraph 66), define a usage policy

Art Unit: 2155

and install the policy on a network storage device (Kanada, page 14, paragraph 188), and prioritize a number of transactions (Kanada, Fig. 3B, element 387; page 10, paragraph 152).

- 17. As to claims 18 and 19, Nolan-Kanada discloses the invention substantially, including transactions flowing into and out of the network storage device (Kanada, page 9, paragraph 136).
- 18. As to claim 21, Nolan-Kanada discloses the invention substantially including determining transmission of transactions based on priority (Kanada, page 1, paragraphs 19).
- 19. Claims 2, 6, 9, and 15, are rejected under 35 U.S.C. 103(a) as being unpatentable over Nolan and Kanada as applied to claim 1 above, and further in view of Gibson et al ("Network Attached Storage Architecture, 2000).
- 20. As to claims 2, 6, 9, and 15, Nolan-Kanada discloses the invention substantially including receiving the usage policy at the network storage device (Kanada, page 14, paragraph 188) and identifying a network storage device on a network (Nolan, col. 25, lines 26-29). While Nolan-Kanada discloses a network storage device and discusses SAN (Nolan, col. 1, lines 43-46), it does not expressly teach a NAS. However, Gibson et al. state that the technologies of NAS and SAN are converging (page 42, "Converging of NAS and SAN"). Therefore it would have been obvious to one skilled in the art at the time the invention was made to combine Nolan-Kanada and Gibson (Nolan-Kanada-Gibson) to view these storage

Art Unit: 2155

techniques as interchangeable alternatives for solving the same set of customer problems (Gibson, page 42).

- 21. Claims 7, 10, 11 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nolan-Kanada as applied to claim 8 above, and further in view of Comer("Internetworking with TCP/IP, 1995).
- 22. As to claims 7 and 10, Nolan-Kanada discloses the invention substantially including a usage policy comprising of a number of rules (Kanada, Fig. 4A; page 2, paragraph 21), each defining a meta data and a corresponding priority and where the policy assigns a priority to a transaction if it satisfies a rule (Kanada, Fig. 3B, element 381; page 10, paragraph 152). But Nolan-Kanada do not explicitly teach the use of meta data. However, the Microsoft Computer Dictionary defines "meta data" as "data about data." Comer does teach the use of a packet that includes a header which contains information about the contents of the data and a data area (Comer, page 92, Fig. 7.2), and the header also contains information on the precedence of the packet (Comer, page 93, Fig. 7.4). In the Differentiated Services technique, Kanada describes the DSCP as a value that describes an aggregate of packets (Kanada, page 1, paragraph 19), and therefore this header would be considered meta data. It would have been obvious to combine the teachings of Nolan-Kanada with Comer because all three references discuss the TCP/IP protocol(Nolan, col. 8. lines 20-21; Kanada, page 5, paragraph 88, Comer, page 92), which include a packet structure that includes a header and a data area.

Art Unit: 2155

- 23. As to claim 11, Nolan-Kanada discloses the invention substantially as described in claim 8. including use of a packet being transmitted from one network device to another (Kanada, page 1, paragraph 17), and the meta data field being read against a usage policy (Kanada, page 1, paragraph 19) and the transaction ordered in a queue according to priority (Kanada. page 10, paragraph 152). But Nolan-Kanada does not explicitly disclose the use of at least one data field and at least one meta data field. The Microsoft Computer Dictionary defines "meta data" as "data about data." Comer does teach the use of a packet that includes a header which contains information about the contents of the data and a data area (Comer, page 92, Fig. 7.2), and the header also contains information on the precedence of the packet (Comer. page 93, Fig. 7.4). In the Differentiated Services technique, Kanada describes the DSCP as a value that describes an aggregate of packets (Kanada, page 1, paragraph 19), and therefore this header would be considered meta data. It would have been obvious to combine the teachings of Nolan-Kanada with Comer because all three references discuss the TCP/IP protocol(Nolan, col. 8. lines 20-21; Kanada, page 5, paragraph 88, Comer, page 92), which include a packet structure that includes a header and a data area.
- 24. As to claim 20, claim 11 performs the same functions as claim 20. Therefore, paragraph 23 of this Office Action discloses all of the limitations of claim 20.
- 25. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nolan-Kanada as applied to claim 8 above, and further in view of Mahon, et al ("Requirements for a Policy Management System," 1999).

Art Unit: 2155

Page 9

As to claim 12, Nolan-Kanada discloses the invention substantially including a usage policy comprising of a number of rules (Kanada, page 2, paragraph 27). But, it fails to teach default rules. However, Mahon teaches a default rule that is enacted if none of the other rules match the action type (Mahon, page 69). It would have been obvious to combine the teachings of Nolan-Kanada with that of Mahon in order to assure that the rules set forth on the network account for any contingencies and to contribute toward the goal of minimal human network administration (Kanada, page 1, paragraph 7).

Art Unit: 2155

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Alicia Baturay whose telephone number is (703) 305-8865. The examiner

can normally be reached on 7:15am - 3:45pm, Monday - Friday. The examiner will be moving in

mid-October and can be reached then at (571) 272-3981. The Tech Center main telephone

number will be (571) 272-2100.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Hosain Alam can be reached on (703) 308-6662. The fax phone number for the organization

where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be

obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AB

HOSAIN ALAM SUPERVISORY PATENT EXAMINER

Page 10